### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006474 Address: 333 Burma Road **Date Inspected:** 29-May-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 1845 **Project Name:** SAS Superstructure **OSM Departure Time:** 645 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Fabrication

**Summary of Items Observed:** CWI Inspector: Mr. Wu Ming Kai

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Prior to Caltrans QA Inspectors' concurring with issuance of OBG deck plate closed rib green tag releases a review of the ultrasonic inspection database is performed to verify all closed rib tack weld repair locations have been ultrasonically accepted. Today this QA Inspector, Mr. Paul Dawson, performed data entry of ultrasonic inspection information from the field generated Ultrasonic inspection data sheets onto the common drive computer database for the following OBG deck panels: DP476-001, DP367-001, DP233-001, DP340-002, DP539-001, DP151-001, DP125-001, DP361-001, DP394-001, DP499-001, DP314-001 and DP124-001.

#### OBG Bay 6

The QA Inspector observed ZPMC welder Mr. Xu Xiujun, stencil 215259 is using shielded metal arc process WPS-B-P-2112FCM to make fillet tack welds on OBG side plate stiffener weld FB208-012-001. The QA Inspector observed a welding current of approximately 190 amps and the base material where the tack welding is being made had been preheated with a torch. Items observed by the QA Inspector appear to comply with project specifications.

# WELDING INSPECTION REPORT

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The QA Inspector observed ZPMC welder Mr. Jia Anquan, stencil 201725 is using shielded metal arc process WPS-B-P-2112 to make fillet tack welds on OBG side plate stiffener weld SP201-012-002. The QA Inspector observed a welding current of approximately 150 amps and ZPMC personnel using a feeler gauge to confirm there is no gap between the stiffener and side plate prior to depositing the tack weld. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Mr. Sun Daocan, stencil 250833 is using shielded metal arc process WPS-B-P-2112 to make fillet tack welds on OBG side plate stiffener weld SP202-012-001. The QA Inspector observed a welding current of approximately 180 amps and ZPMC personnel using a feeler gauge to confirm there is no gap between the stiffener and side plate prior to depositing the tack weld. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Mr. Hong Hongbo, stencil 203206 is using shielded metal arc process WPS-B-P-2112 to make fillet tack welds on OBG side plate stiffener weld Base Plate BP206-012-001. The QA Inspector observed a welding current of approximately 170 amps and the base material is being preheated by a torch prior to welding. Items observed by the QA Inspector appear to comply with project specifications.



#### **Summary of Conversations:**

See above.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer